



October 9, 1973
NUMBER 5105.44

ASD(T)

Department of Defense Directive

SUBJECT Military Satellite Communications (MILSATCOM)
 Systems Organization

References: (a) through (m) listed in enclosure 1

I. PURPOSE

This Directive defines the responsibilities, functions, and organizational relationships for management and system architecture of Department of Defense (DoD) satellite communications systems. This includes identification, analysis and validation of requirements, concept formulation, system planning, general systems engineering, resource integration, acquisition and utilization.

II. APPLICABILITY

The provisions of this Directive apply to the Office of the Secretary of Defense, the Military Departments and the Services within those departments, the Joint Chiefs of Staff, and the Defense Agencies and activities (hereinafter referred to collectively as "DoD Components").

III. GENERAL CONCEPT

Satellite communications are a vital transmission medium serving the Department of Defense. The capabilities which can be obtained and the services which can be provided by satellite communications are constrained by funds, available frequency spectrum, and optimum spacecraft orbital locations, among other constraints. Therefore, effective utilization of these assets can be achieved only if considered in the context of serving the totality of DoD users. Recognizing system architectures are evolving for major DoD communications systems, an architecture for military satellite communications must also be developed within the

broad perspective of a unified systems approach. Recognition of a system architect within the existing management structure is therefore required to insure the successful integration of satellite communications into the DoD communications architecture. The Defense Communications Agency (DCA) and the Joint Tactical Communications (TRI-TAC) Office are the system architects and engineers for those specific communications systems described in their respective Charters, DoD Directives 5105.19 and 5148.7 (references (b) and (c)). The Director, DCA will have primary responsibility to perform the functions of system architect for the current and future DoD satellite communications systems. The Director, TRI-TAC Office has the responsibility to insure that the architecture is in accordance with tactical communications considerations. The DCA and the TRI-TAC office, acting in concert with the Military Departments and other DoD Components, will establish the satellite communications system architecture to meet operational requirements by providing a flexible, interoperable satellite transmission medium for the existing and planned DoD communications systems. A unified approach with clear assignment of responsibility for continuing control and assignment of the operational satellite communications assets as defense needs change is required. A clear assignment is needed of the responsibilities of the JCS in all satellite communications systems.

V. OBJECTIVES

- A. Establish a single coordinated approach to the planning, acquisition, implementation and operational deployment of reliable, survivable, secure and flexible DoD satellite communications systems.
- B. Achieve in a timely, economical and orderly manner the operational satellite communications capabilities required by the DoD.
- C. Achieve the necessary degree of interoperability and compatibility among military satellite communications systems as well as with other military and commercial communications systems.
- D. Eliminate unnecessary duplication, where feasible, in the development of satellite communications systems and equipment.

V. SCOPE

The scope of this Directive is limited to matters relating to satellites and terminals which have a primary function of communications. This includes satellite communications subsystems on host satellites where such hosts have a primary purpose and function other than communications. It also includes associated interconnect facilities to include interface devices, system control assets, and associated COMSEC equipment. This Directive is intended to be consistent with references (a) through (m). Deputy Secretary of Defense memorandum (reference (k)), which addresses the DSCS remains in effect subject to the provision that this Directive takes precedence should a conflict arise between this Directive and reference (k). The Military Departments will continue to be responsible for the budgeting, funding and accounting for the development, procurement, operation and maintenance of assigned elements of MILSATCOM systems. This responsibility will be accomplished within the framework of the systems architecture as recommended by the Director, DCA, in accordance with this Directive.

VI. DEFINITIONS AND TERMS

Definitions and descriptive terms applicable for the purpose of this Directive are contained in enclosure 2.

VII. RESPONSIBILITIES AND FUNCTIONS

- A. The Assistant Secretary of Defense (Telecommunications) (ASD(T)) will:
1. Recommend to the Secretary of Defense a program and budget for military satellite communications in accordance with DoD Directive 5135.1 (reference (a)).
 2. Evaluate options presented in satellite communications systems plans and assign specific tasks in support of selected options to the heads of other DoD Components.
 3. Provide policy and direction relative to satellite communications in accordance with DoD Directive 5135.1 (reference (a)).
 4. Insure the establishment of technical and performance standards for satellite communications systems and

equipment, and for interface of these systems and equipment with other communications systems and equipment.

5. After consultation with the Joint Chiefs of Staff, recommend to the Secretary of Defense:

- a. Use of assets and services of MILSATCOM systems by non-DoD US Government Agencies.
- b. DoD positions on matters relating to use of satellite communications systems assets and services by or in cooperation with NATO or Allied nations.
- c. DoD positions on matters relating to use of US and non-US satellite communications systems assets and services by the US Government.

6. Coordinate with the DDR&E on RDT&E matters.

B. The Chairman, Joint Chiefs of Staff, will:

1. Establish operational policies and procedures for all components of the National Military Command System (NMCS) commensurate with his responsibilities as set forth in DoD Directive 5100.30 (reference (d)).
2. Validate requirements for the NMCS and validate WWMCCS requirements of the commanders of the unified and specified commands, in accordance with DoD Directive 5100.30 (reference (d)).

C. The Joint Chiefs of Staff will:

1. Establish policy and guidance concerning utilization of MILSATCOM systems. Direct, in coordination with the Services, the apportionment of operational satellite communications capacity among the DoD Components, using commands and contingency forces to reflect the dynamic variation of national defense needs, when considered necessary for effective crises management. This will include developing and issuing procedures for the timely and orderly processing of Joint, Military Service, and Defense Agency user requirements identified as candidates for satisfaction by MILSATCOM systems.

2. In consultation with the Director, DCA, the Director, NSA, and the Director, TRI-TAC Office, designate those user requirements which will be used as the basis for MILSATCOM systems planning.
3. Process, validate and prioritize user requirements of the commanders of the unified and specified commands, the Military Services, and the Defense Agencies for MILSATCOM systems.
4. Specify operational requirements for interoperability and compatibility among military satellite communications systems as well as with other military and commercial communications systems.
5. Review and approve plans and procedures to insure the effective utilization of operational satellite communications systems.
6. Direct the operational deployment of MILSATCOM satellites controlled by the Joint Chiefs of Staff.
7. Direct the operational deployment of MILSATCOM earth terminals and associated equipment controlled by the Joint Chiefs of Staff.
8. Review and provide recommendations to the Secretary of Defense on MILSATCOM systems planning, programming, and implementation documents, as appropriate, to assist in determining their adequacy, feasibility and suitability in support of joint doctrine, assigned operational missions and contingency plans.
9. Submit recommendations to the Secretary of Defense relative to:
 - a. Use of assets and services of MILSATCOM systems by non-DoD US Government Agencies.
 - b. Matters relating to use of satellite communications systems assets and services by, or in cooperation with, NATO or Allied nations.
 - c. Matters relating to use of US and non-US satellite communications systems assets and services by the US Government.
10. In consonance with policies established by the ASD(T), provide guidance to the Director, DCA concerning the accomplishment of MILSATCOM systems functions assigned at subsection VII. E. herein.

- D. The Secretaries of the Military Departments, Chiefs of the Military Services, and Directors of Defense Agencies and activities will:
1. Identify to the Joint Chiefs of Staff those user requirements which are candidates for satisfaction by MILSATCOM systems. The submission of these requirements will be in accordance with procedures established by the Joint Chiefs of Staff.
 2. Identify, as a basis for acquisition, time-phased quantitative requirements for MILSATCOM equipment based on user requirements validated by the Joint Chiefs of Staff.
 3. Collaborate with the Director, DCA and the Director, TRI-TAC Office, as appropriate, in determining resource requirements for MILSATCOM programs.
 4. Program and budget for resources as prescribed by DoD Directives 7045.7 and 7045.12 (references (i) and (j)).
 5. Provide timely funding support for MILSATCOM programs approved by the Secretary of Defense and consistent with the availability of funds.
 6. Perform tasks approved by the Secretary of Defense and assigned by the ASD(T), to include responsibility for acquisitions in support of MILSATCOM systems in accordance with DoD Directive 5000.1 (reference (h)).
 7. Provide the Director, DCA, the Director, NSA, and the Director, TRI-TAC Office with information required to execute their responsibilities for MILSATCOM systems.
- E. The Director, DCA, under policy and guidance provided by the ASD(T), through the Joint Chiefs of Staff, has the primary responsibility as the MILSATCOM system architect for accomplishing system functions applicable to the totality of DoD satellite communications. In executing these functions he will:
1. Be responsible for the development of system concepts and planning for military satellite communications. In meeting this responsibility he will:
 - a. Establish and maintain, under the guidance of the Joint Chiefs of Staff, a consolidated data base as a management

tool for the processing of MILSATCOM user requirements, and for the support of all DoD Components in systems engineering and design, and to provide for improved visibility of MILSATCOM systems status.

- b. Analyze, in coordination with the Director, TRI-TAC Office, and the DoD Components, user requirements derived from the consolidated data base to provide a technical basis for action by the Joint Chiefs of Staff, and provide recommendations to the Joint Chiefs of Staff to support their actions concerning those requirements which should be satisfied by MILSATCOM systems.
- c. Establish, in collaboration and coordination with the DoD Components, overall goals for MILSATCOM systems, and prepare long-term system plans containing appropriate alternatives and options to meet system goals. After review and comment by the DoD Components, forward such plans to the ASD(T) through the Joint Chiefs of Staff.
- d. In coordination with the DoD Components, develop transition system plans containing fully described options to satisfy the capability and schedule needs of the long-term system plans. Update these plans annually, and after review and comment by the DoD Components forward them, through the Joint Chiefs of Staff, to the ASD(T). Based upon ASD(T) decisions, selected options will form the basis for OSD guidance for Program Objective Memorandum (POM) submissions by responsible DoD Components.
- e. Define the system performance criteria for MILSATCOM systems. This function will be accomplished through system trade-off analyses which consider:
 - (1) Requirements analyses
 - (2) Development Concept Papers
 - (3) Technical, economic and geopolitical constraints
 - (4) Impact of the MILSATCOM interface with other communications systems
 - (5) Communications Security
 - (6) Area Coordinating Papers

(7) Defense Program Memorandums

- f. Develop intersystem performance specifications for MILSATCOM systems as derived from system design and system modeling.
 - g. Review and evaluate the approved MILSATCOM RDT&E programs of the DoD Components to provide recommendations for correlation of overall system development.
 - h. Review other on-going research and development programs which may be applicable to satellite communications and recommend to the ASD(T), through the Joint Chiefs of Staff, research and development options which have the potential to provide the technological base for future systems.
2. Perform general systems engineering to include the following:
- a. Prepare, in coordination with the Director, TRI-TAC Office, interoperability, compatibility and interface criteria for approval by the Joint Chiefs of Staff.
 - b. Develop and maintain a master satellite communications control plan, as defined in Section VI, which includes consideration of satellite control, frequency planning, and satellite power/time allocation to enhance effective utilization of the MILSATCOM systems capability.
 - c. Establish and recommend to ASD(T) criteria for system level tests (simulated and actual) to be performed by the responsible DoD Components, in accordance with DoD Directive 5000.3 (reference (1)), to assess the integrity of the MILSATCOM system design.
 - d. Analyze, on a continuing basis, MILSATCOM system performance deficiencies and recommend corrective action to the appropriate authority.
 - e. Provide technical advice and assistance to the Joint Chiefs of Staff on operational deployment or application of MILSATCOM satellites, earth terminals, and associated equipment controlled by the Joint Chiefs of Staff, to include system configuration alternatives which would satisfy new requirements or solve unexpected system problems.

3. Maintain cognizance of those aspects of the acquisition process which affect system architecture to insure integrity of the system design. In meeting this responsibility he will:
 - a. Review program system specifications and such other existing technical documentation as may be required to assure conformance with system architecture.
 - b. Review results of system level tests and evaluations.
 - c. Be aware of MILSATCOM systems acquisition status and scheduling.
 - d. Provide for the coordination of those aspects of configuration management which affect system architecture.
 - e. Recommend actions to the concerned agencies to resolve problem areas.
4. As requested, provide assistance to the ASD(T) in monitoring the funding requirements and utilization of financial resources as authorized by the Secretary of Defense for MILSATCOM systems and identify imbalances to the proper authority for resolution.
5. Provide to the ASD(T), the Joint Chiefs of Staff, or the US Military Communications-Electronics Board, as appropriate, technical assistance in developing and supporting US DoD positions in military satellite communications matters. Provide technical assistance to the National Security Agency in international COMSEC matters pertaining to military satellite communications.
6. Communicate directly, for purposes of information exchange, with all agencies which have a role in the planning, acquisition, and operation of military satellite communications.
7. Perform such other functions with regard to military satellite communications as may be directed by competent authority.
8. Advise and assist the DoD Components concerning the development and implementation of plans and programs related to the MILSATCOM systems.
9. Serve as a technical advisor to the ASD(T) for MILSATCOM systems matters.

10. Establish a Military Satellite Communications Systems Office (MSO) as defined in Section VI. Under the direction of the Director, DCA, the Deputy Director, DCA, Military Satellite Communications Systems, will perform the functions specified above.
- F. The Director, TRI-TAC Office, under policy and guidance provided by the ASD(T), is responsible for the system definition and system engineering, and coordination of development and production of the systems and equipment under the TRI-TAC program in accordance with DoD Directive 5148.7 (reference (c)). This includes the responsibility for satellite communications to satisfy the objectives of the TRI-TAC program. In this regard, he has responsibility to assure the achievement of the necessary degree of interoperability among tactical communications systems and with other DoD communications systems. In meeting these responsibilities he will:
 1. Collaborate with the Director, DCA in the analyses of user requirements as prescribed in subparagraphs VII. E. 1. a. and b., to insure that the requirements used as the basis for TRI-TAC systems planning are given proper consideration.
 2. Collaborate with the Director, DCA and the Director, NSA in the development of MILSATCOM systems concepts and planning, including identification and correlation of system goals, participation in system trade-off analyses, and development of intersystem performance specifications as described in subparagraphs VII. E. 1. c., d., e., and f.
 3. For that portion of MILSATCOM systems earth segments defined in approved TRI-TAC system plans, accomplish the general systems engineering, maintain the integrity of system design, and coordinate the development and production of those end-items.
 4. Recommend to the Director, DCA, MILSATCOM system parameters and interface criteria to assure interoperability and compatibility with the systems and equipment developed under the TRI-TAC program.
 5. Participate in the design review and review of testing of MILSATCOM systems to the extent required to assure that

the TRI-TAC program is responsive to interface requirements and that TRI-TAC interface criteria have been reflected in the design.

6. Provide assistance to the ASD(T) in monitoring the utilization of financial resources as authorized by the Secretary of Defense.
7. Communicate directly, for purposes of information exchange, with all agencies which have a role in the planning, acquisition and operation of MILSATCOM systems.

VIII. RELATIONSHIPS

- A. In the performance of their functions, the Director, DCA and the Director, TRI-TAC Office will:
 1. Coordinate actions, as appropriate, with the Joint Chiefs of Staff, the Secretaries of the Military Departments, and the heads of other DoD Components and governmental agencies having related functions in the field of their assigned responsibilities.
 2. Maintain active liaison, for exchange of information and advice, with components of the DoD and other departments of the Government, as appropriate.
 3. Make full use of established DoD facilities rather than unnecessarily duplicating such facilities.
- B. The Joint Chiefs of Staff, the Secretaries of the Military Departments, and the heads of other DoD Components will provide support and assistance to the Director, DCA and the Director, TRI-TAC Office in meeting their responsibilities with regard to military satellite communications systems.

IX. ADMINISTRATION

- A. The Deputy Director, DCA, Military Satellite Communications Systems, will be a civilian of appropriate grade, and will be appointed by the Director, DCA.

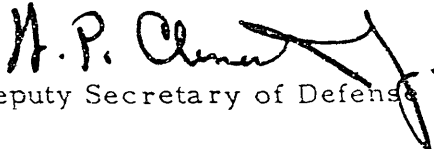
- B. The assignment of other military and civilian personnel to the Military Satellite Communications Systems Office (MSO) will be subject to the approval of the Deputy Director, DCA, Military Satellite Communications Systems Office, with concurrence of the Director, DCA.

X. SECURITY

The Deputy Director, DCA, Military Satellite Communications Systems, will issue MILSATCOM system classification guidance, in accordance with DoD Regulation 5200.1-R (reference (m)).

XI. EFFECTIVE DATE AND IMPLEMENTATION

- A. This Directive is effective upon publication.
- B. The Military Satellite Communications (MILSATCOM) Systems management concept set forth in this Directive will be implemented under the guidance of the ASD(T).
- C. The DoD Components participating in MILSATCOM Systems management will develop and implement instructions, where required, to carry out assigned responsibilities and will furnish three copies to the ASD(T), the Joint Chiefs of Staff, the Director, DCA, the Director, Joint Tactical Communications Office, and other components concerned, within 120 days of publication of this Directive.


Deputy Secretary of Defense

Enclosures - 3

- 1. References
- 2. Definitions and Terms
- 3. MILSATCOM Systems Functional Relationships (for information)

References

- (a) DoD Directive 5135.1, "Assistant Secretary of Defense (Telecommunications)," January 11, 1972
- (b) DoD Directive 5105.19, "Defense Communications Agency," September 18, 1967
- (c) DoD Directive 5148.7, "Charter for the Joint Tactical Communications (TRI-TAC) Program," May 27, 1971
- (d) DoD Directive 5100.30, "World-Wide Military Command and Control System (WWMCCS)," December 2, 1971
- (e) DoD Directive 4630.1, "Programming of Major Telecommunications Requirements," April 24, 1968
- (f) DoD Directive 4630.5, "Compatibility and Commonality of Equipment for Tactical Command and Control, and Communications," January 28, 1967
- (g) DoD Directive C-5200.5, "Communications Security (COMSEC) (U)," April 13, 1971
- (h) DoD Directive 5000.1, "Acquisition of Major Defense Systems," July 13, 1971
- (i) DoD Instruction 7045.7, "The Planning, Programming and Budgeting System," October 29, 1969
- (j) DoD Instruction 7045.12, "The Five Year Defense Program Telecommunications Subsystems," February 24, 1972
- (k) Deputy Secretary of Defense Memorandum, "Defense Satellite Communications System," September 3, 1968
- (l) DoD Directive 5000.3, "Test and Evaluation," January 19, 1973
- (m) DoD Regulation 5200.1-R, "Information Security Program Regulation," July 1972, authorized by DoD Directive 5200.1, June 1, 1972

DEFINITIONS AND TERMS

For the purpose of this Directive the following definitions and terms apply:

- A. Acquisition. The acquisition process includes the development, testing, procurement, and consideration of logistic support of systems, subsystems, equipment, and modifications, and supporting projects and studies.
- B. Compatibility. Capability of two or more items or components of equipment or material to exist or function in the same system or environment without mutual interference.
- C. Coordinate. To solicit comments or opinions from appropriate offices for the purpose of achieving harmonious agreement, with the goal of obtaining concurrence or nonconcurrence. Nonconcurrences are forwarded to the proper authority for resolution.
- D. Program System Specifications. A document or documents which state the technical and mission requirements for a system as an entity, allocates requirements to functional areas (or configuration items) and defines the interface between or among the functional areas.
- E. Diplomatic Telecommunications Service (DTS) Satellite Network. A network of Diplomatic Telecommunications stations operating in the earth coverage (EC) mode of the DSCS satellites and within an allocated amount of satellite power. The DTS will interface with the DSCS at one or more locations in each satellite area. The DSCS stations designated for interface will be equipped to operate in the DTS network.
- F. Earth Segment. See item N.1.
- G. Interface. A boundary or point common to two or more systems, subsystems or other entities across which useful information flow takes place.
- H. Interoperability. The condition obtaining among communications-electronics systems or items of communications-electronics equipment when information or services can be exchanged directly and satisfactorily between them and/or their users. The degree of interoperability should be defined when referring to specific cases.

I. Military Satellite Communications (MILSATCOM) Systems.

The totality of existing and planned DoD satellite communications systems consisting of space segments and earth segments, the interfaces between systems and between segments, and interfaces with other communications systems. This does not include the US Air Force facilities utilized for satellite control as defined in item P.3. or those elements of multipurpose satellites which do not function as a subsystem integral to a particular MILSATCOM system.

1. Defense Satellite Communications System (DSCS). Primarily this system provides the DoD with long distance communications which by their nature cannot adequately or reasonably be provided by commercial service or by other military systems. The DSCS space segment includes transponders in the DSCS Phase I and the DSCS Phase II and may include portions of other transponders as specified by the Secretary of Defense. The earth segment of the DSCS includes those terminals operated in the DSCS in support of Defense Communications System (DCS) trunks.
2. Tactical Satellite Communications (TACSATCOM) Interim Operational Capability (IOC). Operational use of the research and development satellites LES-6 and TACSAT-1 by residual research and development terminals and recently procured terminals. The TACSATCOM IOC is operated under the control of the Joint Chiefs of Staff and is managed for the JCS by the Chief of Staff, US Air Force. This IOC has successfully demonstrated the feasibility and suitability of satellite communications support for low-capacity and mobile user needs.
3. Fleet Satellite Communications (FLTSATCOM) System. The US Navy satellite system under development primarily to improve Fleet communications. The FLTSATCOM is designed to serve relatively large numbers of shipborne, airborne, and other low-capacity and mobile users. The system includes the FLTSATCOM spacecraft and all US Navy-owned earth terminals to be operated through them. Also included are the US Navy shipborne super-high frequency (SHF) terminals which will be operated through the DSCS space segment.
4. Air Force Satellite Communications (AFSATCOM) System. AFSATCOM is the US Air Force satellite communications

capability under development to provide operational service for selected high-priority World-Wide Military Command and Control System (WWMCCS) and US Air Force requirements. AFSATCOM includes (a) the portion of the FLTSATCOM space segment designed for US Air Force use, orbiting transponders which provide coverage in the polar regions, and US Air Force-owned terminals operating through the foregoing space segments, and (b) the airborne terminals to be operated in the DSCS.

5. Survivable Satellite Communications (SURVSATCOM) Development Project. That project managed by the US Air Force to develop a highly survivable communications satellite to serve the most critical general war command and control functions. SURVSATCOM includes the Lincoln Laboratory Experimental Satellites 8 and 9 (LES-8/9), scheduled for launch in FY 75, and terminals under development for use with LES-8/9.
6. Ground Mobile Forces Satellite Communications Development Project. The US Army, US Air Force and US Marine Corps project managed by the US Army to develop a family of ultra-high frequency (UHF) and super-high frequency (SHF) tactical earth terminals using available communications satellites to support mobile ground force operations.
- J. Military Satellite Communications (MILSATCOM) Systems Office (MSO). The office established by the Director, DCA to perform assigned MILSATCOM Systems functions.
- K. Non-US Satellite Communications Systems. These systems encompass those non-US systems/equipments which, by agreement, either utilize MILSATCOM systems or are utilized by MILSATCOM systems to satisfy DoD requirements.
 1. NATO Satellite Communications System (NATO SATCOM). An operational NATO network which, through agreement, also includes access to the DSCS space segment. The NATO SATCOM III spacecraft is planned to be operational prior to late 1975. It is considered a system related to MILSATCOM systems for purposes of US/NATO interoperability and for US use of the NATO network to augment the DSCS capability prior to the DSCS Atlantic spacecraft attaining operational status.

2. United Kingdom Defence Satellite Communications System (SKYNET). SKYNET is the UK Defence Satellite Communications System comprised of space and earth segments. The space segment provides for satellites to be located over the Indian Ocean and the shared use, by agreement, of US DSCS satellites positioned over the Atlantic and Pacific. The earth segment includes ground terminals and shipborne terminals. It is considered a system related to MILSATCOM systems for purposes of US use of the SKYNET space segment in support of DSCS requirements in the Indian Ocean area, and for purposes of interoperability between the US and United Kingdom systems.

L. Responsibility (Primary). A primary functional interest in, and responsibility for, a specific plan, program, or system. Agencies assigned primary responsibility will insure coordination with all other agencies. Nonconcurrences by these other agencies are forwarded by the agency having primary responsibility to the proper authority for resolution.

M. Satellite Communications Control Plan. A master plan which provides information for the operational benefit of all users of a particular space segment, and which describes the control exercised by a master communications station to insure that all units of the associated earth segment operate within their assigned parameters and according to prescribed procedures.

N. Segment.

1. Earth Segment. The earth segment includes all equipment not in space orbit and capable of communicating with a satellite. Such equipment may be airborne, shipborne, or land-based. The earth segment may be divided into three basic functions-- those which use the satellite for operational communications, those for satellite communications control, and those which exercise satellite control (see item P.). These three functions may utilize the same terminal, the same type of terminal, or other terminal variations including completely separate facilities.

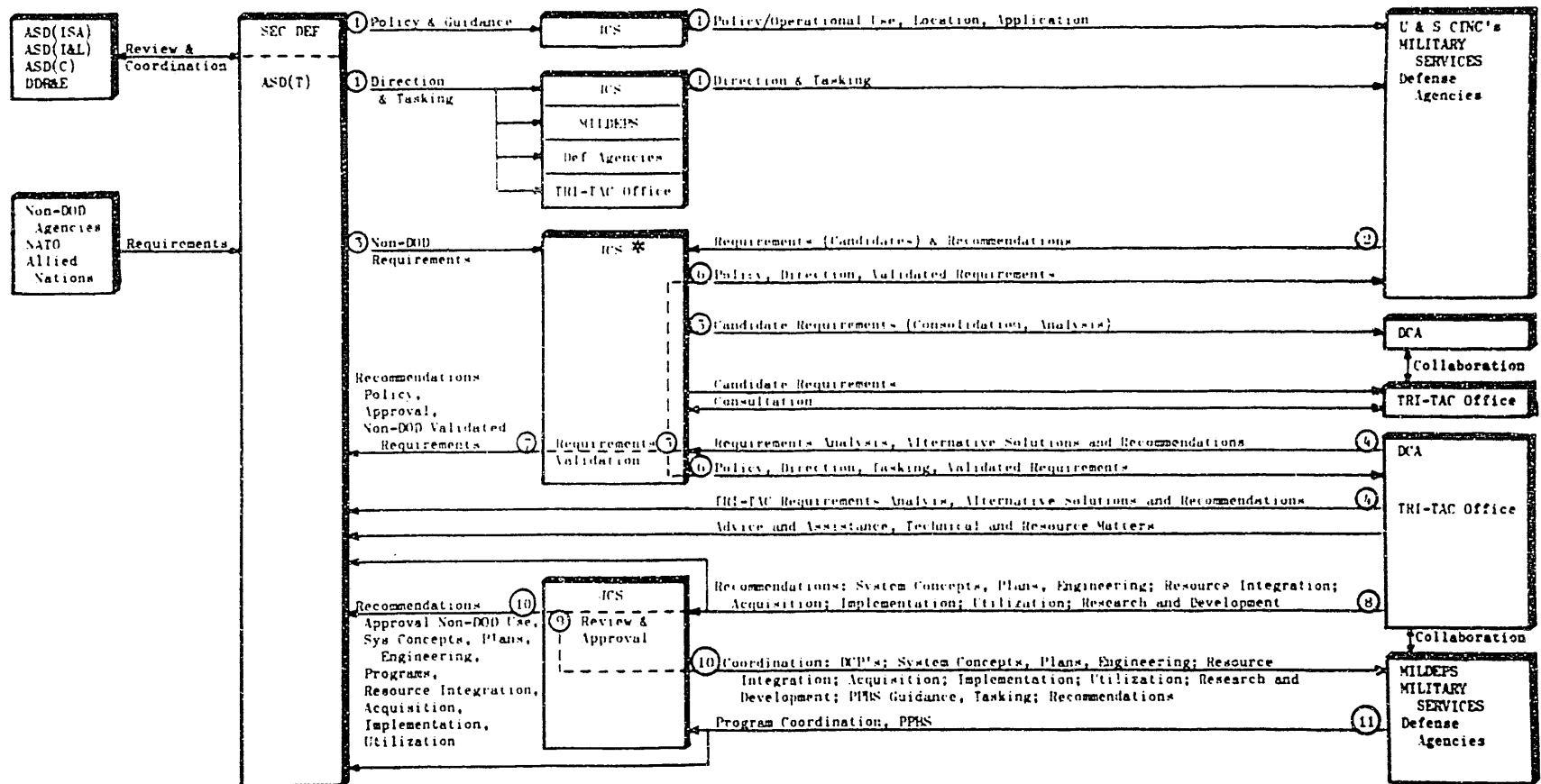
2. Space Segment. One or more satellites dedicated to support of MILSATCOM systems. A space segment may include those elements of multipurpose satellites which function as a space subsystem integral to a particular MILSATCOM system.

O. Space Segment. See item N. 2.

P. System Control. System control of communications satellites embodies several different control functions which are accomplished by different levels or types of command and which may be done by the same or separate control facilities. Control functions relate to:

1. Operational Control. The control exercised to determine the location of satellites, the location of fixed earth terminals, and the parameters required for operation of the earth segment, such as allocation of satellite power, bandwidth, access time, and operating frequencies.
2. Satellite Communications Control. The control of a satellite exercised by a master station to insure that the earth segment operates within its assigned parameters and according to prescribed procedures.
3. Satellite Control. The manipulative control and monitoring of on-board subsystems or components of a satellite, including those affecting position and attitude as well as the adjustment and switching of subsystems or components.

MILITARY SATELLITE COMMUNICATIONS (MILSATCOM) SYSTEMS FUNCTIONAL RELATIONSHIPS



* Chairman, Joint Chiefs of Staff, for WWMCCS requirements of the Commanders of the Unified and Specified Commands